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The MANAGEMENT REVIEW

February, 1927

Services of a Company Library

*By F. A. MOONEY, Librarian
Dennison Manufacturing Company*

THE functions of the Library of the Dennison Manufacturing Company, Framingham, Massachusetts, are twofold: 1. Information, 2. Education.

To give information service it is necessary to know the needs of the company personnel and the outside sources of facts in print. Having this knowledge the library functions as a co-ordinator or clearing house to bring needs and resources together. So the background of the information service is the clearing house or brokerage house idea which functions in the following ways:

1. To keep up-to-date a classified list of subjects in which the Dennison personnel is interested. Personal interviews supply the information needed to keep these cards up-to-date. Material on these subjects is found through leads in scanning books, magazines, journals, organization proceedings, pamphlets, such as those published by the American Management Association, book review literature, visits to other libraries and other personal contacts, which supply either the actual material or clues and leads to it. This is the process of anticipating demands.

2. To meet special requests. At three-thirty on a certain Thursday the library was requested to have in the President's Office before noon of the following Saturday all the best pro and con arguments relative to the Metric System. In this particular instance two special delivery letters to New York and Washington, respectively, and a personal trip to two nearby universities enabled the library to deliver the goods at the appointed time and place. Outside contacts are an important factor in enabling the library to meet special requests. Certain libraries specialize in certain fields, and it is one of the jobs of the Dennison library to know these other libraries and their specialties and to maintain exchange privileges with them.

3. To scan the many circulars, pamphlets and bulletins received and to

route them to individuals in the organization who are known to be interested in the subjects discussed.

Education Services

All of the services under this head are performed in close collaboration with the Educational Division. The Librarian co-operates with the Educational Co-ordinator. The services are given as follows:

1. Reading courses are planned for those who wish them. This function involves a diagnosis of needs and the prescription of an adequate reading outline. This is done under the supervision of the Educational Co-ordinator, who plans and directs all of the educational functions.

2. Publicity to the book and magazine resources of the library are given through the following media:

- a. The *Library Review*, issued monthly, the purpose of which is to keep the Dennison folk posted on some of the best and latest literature on economics, psychology, scientific management, industrial relations, selling, distribution, etc. Each issue, reviewing from three to six books and an equal number of magazine articles, pulls from twenty-five to one hundred requests each for books and magazines. A sufficient number of extra copies are bought to minimize circulation delays.

- b. The flyer bulletins released from time to time between regular issues of the *Library Review* list recent book accessions, magazines received, or other news to stimulate interest in the resources of the library.

- c. The library page in *Round Robin*, our house organ, is used to advertise the educational and informational resources of the library.

3. Publicity to outside educational opportunities is given in *Educational Opportunities in Greater Boston*, a weekly bulletin listing lectures and courses available to those who live in the Greater Boston area, including Framingham.

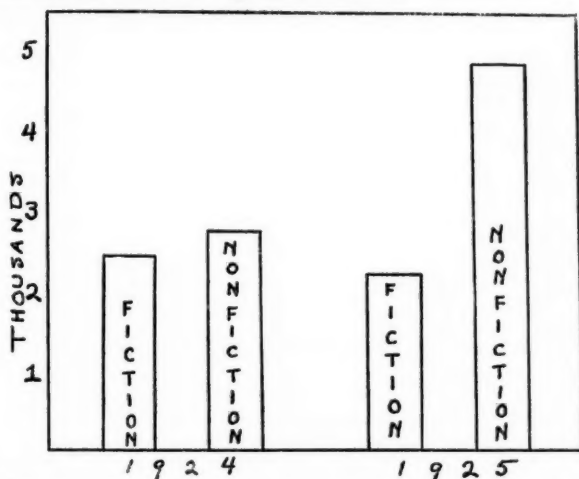
4. Educational material for the Study Groups organized by the Educational Division is furnished by the library.

Operating Technique

1. The principle underlying our circulation system is to keep accurate records and to expedite turnover to a degree consistent with satisfactory service to each customer. We circulate each week from seventy-five to a hundred books, and our weekly magazine turnover is from four hundred to five hundred.

- a. **The type of books circulated.** The library has been gradually eliminating fiction circulation, largely because of the cost of this service. The demand is for the best sellers, and it was found to be an expensive proposition to purchase enough of the new books to meet the demand for them. The company recognizes the demand, however, and a new way of meeting it is described in section three, below.

The attached chart shows graphically comparative fiction and non-fiction circulation figures for the years 1924 and 1925. The increasing lead of non-fiction shows a significant trend.



COMPARATIVE CIRCULATION OF FICTION AND NON-FICTION AT THE LIBRARY OF THE DENNISON MANUFACTURING COMPANY

b. Magazine Circulation. All magazines are requisitioned by and through the library. The library circulates fifteen general magazines and all others are sent to the departments that have special use for them. Of those circulated by the library only four, except in special cases, are allowed to a person, because it is believed that more than that number would not be read.

The library not only requisitions all magazines, as well as all books, but has complete records of where they are kept. In fact, all the special magazines are checked in the library before they are forwarded to the departments in which they are kept for reference.

2. Divisional Branch Libraries. A new service just inaugurated is that of establishing small branch libraries in two of the factory divisions. The idea back of the experiment is to use divisional units as library jobbers. By this method the books are placed within easy reach of all the employees of the division and the division head and members of his staff are equally accessible to give advice and encouragement to all who are interested in self-education through continuation reading or reading with a purpose. The experiment will be watched with a great deal of interest as the idea back of it, viz., that of placing the book near the actual and potential readers in a given unit, together with the consent and co-operation of the division head and his staff, strikes us as a sound policy. Records of circulation will be kept and forwarded to the library.

3. **Circulating Library for Fiction.** Plans are now under way for negotiating with a lending library organization to install a branch in the Dennison plant. It is hoped that this plan will meet the demands for current fiction. The two distributing centers will be the lunch room and the library. Books may be taken in the lunch room during the noon hour, and may be drawn from the library at any time during the day. The usual circulating library rates will be charged. This experiment also will be watched with considerable interest.

The motivating principle underlying every aspect of Dennison library service is that of making educational and informational resources available to every Dennisonian.

Selling Through Retailers and Branch Stores*

By H. A. NOBLE, *General Sales Manager*
Diebold Safe & Lock Co.

WE OPERATE our own branch stores, located in the principal large cities. We also operate through dealers, and we sell direct to the consumer.

We sell an entire line of vault equipment, with which you are all familiar, vault doors, safety deposit boxes, steel linings, grills, etc., and we also sell another line known as our commercial line, fireproof safes and complete record protection for all classes of business. We call our two lines: Burglarproof and Fireproof. A separate sales organization must be maintained to sell each.

In the selling of our burglarproof line we find, first of all, that it takes a specially trained man. It has been our experience that practically we have to deal with the consumer. I am not going to touch very much on that because Mr. Westphal covers that subject¹ more thoroughly. Selling direct to the retailer would, I think, come under our dealer.

We operate, first of all, through a series of absolute territories. We designate a given section of the country and that territory is controlled either by our dealer or by our branch store. In that given territory we find it necessary, since our methods of distribution have changed a good deal during the last few years and are being improved, that a road man cannot travel advantageously much beyond a radius of about thirty miles. The cost of getting business beyond that radius seems to be prohibitive, probably because the type of salesmen we sent out lacked the training necessary to cope with the trade today.

The worst trouble we seem to have at present, and I think all of you

*Presented at the A. M. A. Sales Executives' Conference held in Cleveland, October 11, 1926.

¹"Selling Direct to the Consumer," presented at the A. M. A. Sales Executives' Conference in Cleveland, October 11, 1926.

practically share it, is getting the right type of men to make really efficient salesmen. In our school at Canton, started about two years ago, we now educate our salesmen by building up an organization. We pick almost entirely young men right out of college, take them into the factory, give them about a year's training, part of which is in the factory, part in sales organization and in advertising. These student salesmen are then transferred to our branch stores and placed directly under the branch manager. They will become the backbone of our branch manager organization.

Our salesmen also have to know pretty much the fundamentals of our business. For instance, in selling a safe, they cannot actually sell the article itself but must make a complete survey of the buyer's office. It becomes really a lengthy proposition with our men to put over any kind of sale. It isn't a matter of just going out and closing a deal, but is more a case of working up the prospect in dealing with the customer, telling him exactly what he should have, or else being able to think the problem out for him.

In the first place selling to the banks necessitates interesting them long before they actually buy our product. It is an engineering proposition, for our salesmen must not only sell the article but plan the vault, give the bank ideas, and at the time of the sale still perform their sales duty. So our bank vault men really must have a certain amount of engineering experience along with good common sense and salesmanship.

Our training school has made us realize that today we cannot handle our business with men of the older school.

Branch Stores Necessary

We sell through direct owned branch stores, and dealers, because experience has taught us, especially in dealing with banks, we must maintain our own branch stores. We control practically everything east of the Mississippi through them. The dealer will not as a rule go to the expense of training and developing men capable of selling our product, so we handle our own stores exactly as we do our dealers. In making a definite territory we insist that all our branches and men work it to the utmost. We have been getting most of our business from the thirty-mile radius within which the branch or dealer operates. Beyond that circle we have specially trained men to work through what we call sub-dealers. In that way we cover our entire territory as well as we can. One of the reasons for going into this sub-dealer proposition is that we have found the local distributor invading our field very largely. That is, we come under the office equipment division and a man selling desks and file equipment also sells safes. The local distributor usually has a certain amount of rather strong prestige in his home town. So we take a man who handles other lines and try to interest him in our safe along with the rest of the office equipment. This tactic has worked out fairly well.

We have attempted to establish definite policies and prices. We do establish a definite price on our fireproof product. Our burglarproof product is purely an engineering product. Each bank has some special idea of its own that must be incorporated into the purchase. The dealer is capable of selling the fireproof safe line, as he has in most cases salesmen capable of specialty selling.

If a dealer has a given territory for us we have set up a quota. It then becomes necessary for us at least to attempt giving him some real data and facts to work on because it is rather hard for him to pick up the loose ends and try to sell a specialty product by the old method of a sales data book or a catalog. We educate him therefore as we do our branch men and give him as much supervision. This method has greatly increased our volume of sales last year. We have been a little more careful in selecting our dealers and probably don't operate through quite as many as most other manufacturers. We limit dealers to the territories we have set up, and they necessarily operate through sub-dealers or local men.

We now attempt, through sales bulletins, advertising, etc., to educate our dealers. This year for the first time in our experience we are calling a general sales meeting of all our own branch men, our higher type and vault salesmen, and our dealers. The object of bringing the men together is to get them better acquainted with our organization, to educate them in our methods of selling rather than let them flounder along as in the past, to interest them in developing a standard uniform selling practice.

We ought to get better results from that method. Part of our selling requirements, as I brought out a little while ago, is that a man has to be especially trained, particularly in vault work. That is just as true of our dealer. We have either to furnish him a man or he will supply one whom we will take into the factory and train. After we send a man out to the dealer or branch, he stays out in the field just so long before he comes back for additional training. Naturally he will grasp a great deal more after his second or third visit to the plant than he did in the beginning or in the training school.

Both lines of business require specially prepared men to meet the special requirements of our industry. The organization which accomplishes this method of selling is: We operate, first, through our general sales department which supervises and handles the branches, the dealers and the vault salesmen. Through them the branch managers employ most of their local salesmen who are then sent in to us for additional training and later sent back. We have found it a much better method to keep a man originally from the Pacific Coast operating on the Pacific Coast. If we can get men from the local territories to develop into good men, we certainly get better results than by trying to pick and train local talent for working in various territories.

THE MANAGEMENT INDEX

Abstracts and News Items

GENERAL MANAGEMENT

The Industrial Staff Organization

A discussion of the idea that the staff is as important in industry as it is to the military organization. A comparison is made between line organization and staff organization. Quotations and definitions comprise the greater part of the article.

In conclusion, it is stated that the next great step is the merging of production control, financial control, purchasing and selling, into one of super-control, viewing business as an entirety from market analysis through to the shipping platform. In this development staff will be as important as line. By C. E. Knoeppel. *The Society of Industrial Engineers Bulletin*, December, 1926, p. 15 :12.

Statistical Control of Inventories

Both the uses and the limitations of a statistical method of controlling supplies inventories are demonstrated in the experience of this company. Such procedure as that followed here is readily seen to be desirable in so far as it sets reasonable standards on a basis which is not simply an arbitrary estimate. Standards so determined must not be thought of as completely final, however, but must be held subject to change as altered conditions dictate. The particular method outlined here has the merits of simplicity, with results as good as could be attained by more elaborate processes. The need for using common sense in all such procedure, and for giving attention to the causes of conditions being what they are, is clear. In brief, statistical methods of

control have their uses, though they must not be held to be an absolute solution for all problems. Their application must be tempered with the judgment which is a requisite of all successful management. While the above discussion has been confined to inventories of supplies, it would seem that similar methods might be advantageously employed to set normal standards for other types of inventories. Case Studies in Business. *Harvard Business Review*, October, 1926, p. 95 :6½.

Functions of Municipal Government Which Affect Business and Industry

This article is a careful analysis of the effect which municipal government has on business, covering such items as city finance and taxation; special assessments for improvements; personal property taxes; taxes on business; and general physical conditions such as traffic control, zoning, fire control, etc. By A. H. Johnson. *Harvard Business Review*, October, 1926, p. 27 :14.

Sales and Orders as an Aid in Forecasting

This article is a description of the technique employed in making use of sales and orders in forecasting in the Western Electric Company. There are interesting charts showing the sales and orders received compared with the general business, relation of commitments and merchandise to orders on hand and to sales, and turnover of investment. By Edmond E. Lincoln. *Harvard Business Review*, October, 1926, p. 41 :5¼.

Building an Organization and Establishing Financial Control

This fourth article in a series on management problems in the small plant is a very general treatment of such subjects as decreasing handling costs, improve-

ments in packing and shipping, personnel, improvements in product, new uses for products, capital limitations and introducing new products. By Henry P. Wherry. *Manufacturing Industries*, December, 1926, p. 419 :4.

FINANCIAL MANAGEMENT

Financing Industries in Baltimore City

The procedure of an organization originally intended for a civic purpose in investigating the financial requirements of a manufacturing concern. It is a recognized principle in small industrial financing that capital interests must have a control or participation in the common stock profits unless the position of security offered does not warrant a voice in the management and an additional return on the investment. The Industrial Corporation of Baltimore City, after making its usual investigation cooperates with the industry in securing its fixed or working capital requirements. It may supply certain requirements direct from its own revolving fund or participate with other investors in supplying capital. The Corporation also renders these other services: operating advisory, marketing advisory, consulting general, cost and general accounting and a clearing house for industrial investments. By G. Harvey Porter. *Manufacturing Industries*, December, 1926, p. 433 :6.

If Winter Comes to Prosperity

An analysis of some of the business panics of the past. It is not predicted that there is a crisis in the making, but the conditions which have gone before are summarized with the object of anticipating a crisis; bankers and business men should take stock of their affairs. There is no evidence in our present control of economic affairs to indicate that periods of readjustment will not be needed in the future just as they have been in the past,

although they may be different. Old factors have been brought under control, but new ones have developed. By Ivan Wright. *The Burroughs Clearing House*, January, 1927, p. 14 :3.

Standard Costs

In the new methods of standard cost accounting the variations from standards are featured. The whole accounting and checking process is a simplified matter of ascertaining and searching out the reasons for the differences between actual practice and standard practice. Standard costs are a real means to the control of costs and the protection of profits. By Ernst & Ernst. 25 page booklet.

Crop and Field Cost Accounting on Hawaii's Sugar Plantations

This pamphlet deals with the accounting features which are peculiar to the Hawaiian sugar growing industry. The "crop system" of accounting is described, which is recognized by the federal and territorial governments for income tax returns and which rests on the principle of establishing as profits the difference between the receipts from the sale of the product and the cost of production plus delivery to market. Monthly operating expenses are segregated and the various items of expense are distributed, first, over the three crops in various degrees of progress and, then, over the individual fields. All plantation activities are classified under direct production, operations and construction work incidental thereto, into merchandising and ranching, health,

welfare and order, accounting and statistics. Under these phases of activity the types of accounts are described in detail. This system of crop and field costing is designed to obtain an accurate knowledge of the elements of profitability in field and factory so that the present low price of sugar will not ruin the industry. Diagrams illustrate the accounting procedure. National Association of Cost Accountants. *Bulletin*, December 15, 1926. 23 p.

The Payroll Check Plan

A questionnaire reveals that bankers favor the substitution of checks for cash in paying off the nation's wage earners. While it is impossible to reckon exactly what the losses have been, it is estimated that payroll robbers got \$1,856,874 in six months, that twenty persons were killed and forty wounded. It is clear that banks throughout the country are keenly interested in the subject, and they have been almost unanimous in pledging their support to any effort the Clearing House Section might take to standardize banking practice with respect to the use of payroll checks. By John R. Downing. *American Bankers Association Journal*, January, 1927, p. 491 :3.

Business Potential: What It is and How It Can Be Measured

The business potential is the present and future profit-making capacity of an organization. An investigation which would measure this capacity, in order to arrive at sound conclusions concerning the industrial enterprise, must consider the following basic factors. An analytical survey of the individuals who constitute the business, with particular emphasis on the major and minor executives, whose degree of effectiveness should be measured by individual and group actual performance records. An analytical study of the product with relation to consumer requirements, market stability, and distribution policies. This includes an examination of the price, quality and service

competition in relation to cost of product and to sales volume. The elimination of material waste must be determined where material is the largest factor, and that of man hour waste where labor is the largest cost element. Their relationship to total cost must be carefully analyzed. Finally, the investigation should include a study of the current financial and credit position of the organization. With the knowledge obtained concerning the company, its product, its sales, administrative and manufacturing costs, a balance sheet and profit and loss statement can then be projected over a long period of time. By William O. Lichtner. *Industry*, December 25, 1926. p. 1:2.

Planning For 1927 Budgets

A large proportion of business men have now installed budget forecasting as a part of their regular systems. The methods used vary widely, but all have the same purpose of judging as closely as possible what business they can expect during the next six months or the next year. The majority of concerns seem to be planning on about 95 per cent of the business done in the first half of 1926. Advice is given to put less stress on increasing volume and more stress on keeping down expenses, reducing indebtedness and tying in the loose ends. The watchword should be better business, not bigger business, during the coming year. *Babson's Reports*, December 28, 1926.

Recent Developments in Federal Reserve Policy

This article discusses the effect of Federal Reserve policy on business conditions as exercised through the money market and expressed in: 1, rediscount rates; 2, purchases and sales of securities; 3, operations in the acceptance market.

Of recent years whenever business expansion has become rapid and there have been evidences of developments which might lead to inflation, the influence of the Reserve operations was ex-

erted on the side of higher money rates and thus tended to restrain the development of excesses. On the other hand, when business was receding, and there appeared the possibility that an old-fashioned depression was impending, Reserve operations tended to ease the money market, and thus to exert a stabilizing or stimulating effect on business. By Joseph B. Hubbard. *Harvard Business Review*, October, 1926, p. 47 :7½.

Stock Dividends—Capital or Income

It is now generally recognized that stock dividends are not income. We have a fairly uniform policy. The courts, the Administration, and Congress have realized the economics of stock dividends, but there is still disagreement among them as to what constitutes a stock dividend. Up to a certain point, the courts "look through all form of corporate transactions and have regard to the substance." In the Phellis and Rockefeller cases the court evidently regarded the unimpairment of the capital of the old companies as a factor of substance. The opinion of Thomas Reed Powell seems particularly pertinent when applied in the Marr case. He said, in regard to the Phellis and Rockefeller cases, "It is therefore difficult to resist the conviction that the most recent interpretations of the 16th Amendment mean that Congress may always treat two corporations as separate and distinct for the purpose of taxing as income a dividend paid by one in the stock of another. The Marr case involves practically all of the aspects of stock dividends that we have investigated. On those principles of income which were laid down in the first part of this article, it is difficult to see how the transaction resulted in income to the stockholders of the General Motors Corporation. The substance of the transaction was disregarded. All persons concerned know that the business has not been changed, that the new corporation is the same as the old. The stockholders of the old corporation have no more

interest in the new corporation than they had in the old.

It might seem unnecessary to discuss a case that was decided under an income tax law that has since been superseded. It is important when it is remembered that we have had a new income tax law every year or two. What will the future attitude be? Will the departments of the government always be in agreement? The outlook is dubious. It is to the best interests of the country that a consistent policy be maintained by the government in the case of stock dividends as in all its dealings with business. But more than consistency is necessary. The laws and the interpretations of the laws must be in accord with sound economic policy, and a law that is not economically sound should be repealed or the courts should interpret it in the light of substance rather than form, in so far as their discretionary powers will allow them. Legal Developments Significant in Business. *Harvard Business Review*, October, 1926, p. 102 :13½.

The Management Aspect of the Comptroller's Work

To provide other executives with such information quickly, clearly, and concisely is the major part of the comptroller's contribution to the scheme of complete cooperation. The extent of the comptroller's influence is dependent on the degree of unity attained by the various constituent parts of the organization. It may represent an actual control, under a system of centralization of authority, with power to institute standard methods throughout its various units, as in the case of associated or subsidiary companies under direct management from a central authority; or mere supervision, with the power of the comptroller limited to recommendations or suggestions only, as in the case of a more or less loosely knit merger of several concerns, each of which retains independent management under the direct control of its own administrative officers.

It is necessary for the comptroller to direct the activities of all departments in so far as they concern the maintenance of adequate records; for the benefit to a company of a standardized system of accounts does not lie merely in the fact that any particular system has been adopted, but rather in the information made available thereby, and the manner in which such information is presented.

It is essential that accounting policies aid, and not hinder, production. It is equally essential that, with the possession of adequate accounting control, production should be guided and fostered, based on the results reflected in the reports of the comptroller, and the facts shown on these statements should be carefully studied and immediately utilized.

The value of a report depends upon the time taken after the close of the period to compile it—the less the time, the greater the value. In order to speed matters up, all clerical functions must, of necessity, be under the direction of the comptroller.

Within recent years there has developed a tendency to make the duties of the comptroller more comprehensive, so as to embrace the supervision and control of all records affecting accounts throughout the whole gamut of purchasing, manufacturing, and selling. His organization should be so arranged that he is at all times not only in control of the records reflecting the cost of what is

produced, but also in possession of statistics covering the source and supply of raw materials and all factors which may, in course of time, have some influence on the cost of such items. It may be that facilities for transporting the raw material to the point of manufacture are owned or controlled by his company, in which case his control of accounts should be complete. In such a situation the comptroller covers a wide field and should be in position to supply information of the greatest possible value to other executives.

In addition to the control of records, presentation and interpretation of statistical information, the comptroller should have complete control of plant and property records, depreciation, depletion, and amortization. He also should have control of all tax matters, both property and corporate, and the preparation of all returns; also, physical control of raw materials and supplies and the taking of all inventories.

He should maintain a check up on the receipt and disbursement of cash and be consulted in all matters pertaining to selling and purchasing that require the determining of a policy by the company; and where conditions of such transactions are of an accounting nature, they should be defined by the comptroller. By "X." *Harvard Business Review*, October, 1926, p. 21 :6.

OFFICE MANAGEMENT

Organization: *Job Analysis, Employment, Pay, Tests*

Measures of Occupational Success

The choice of a criterion of occupational success will vary with the use to which it is to be put, as well as with the extent and dependability of available records. Measures of output are by all odds the best criterion, if the worker's output is conditioned mainly by his own ability and persistence, and not by factors outside

of his control. Time required to learn the job is a good criterion where training is expensive. Length of service, as expressed in terms of ability and willingness to hold down the job for at least six months (or some other suitable period), is a clear-cut criterion of success which has proved extremely useful in selection studies. In jobs where high

proficiency is essential, the worker's measured performance in a well-standardized trade test or searching proficiency examination is the best gauge of his actual ability. Ratings or supervisor's estimates of relative success are, on the other hand, the least dependable of criteria, to which recourse will be had reluctantly, and only when the management cannot provide a more reliable and objective measure of occupational accomplishment, or of relative value to the firm. By W. V. Bingham. *Harvard Business Review*, October, 1926, p. 1:10.

Elimination of Waste in Clerical Operations

To produce efficiently, four factors must be kept constantly in mind: Time, Space, Energy, Material. Other factors to be considered are the elimination of unnecessary records, the duplication of effort, and lack of effort. Typists and other operators of mechanical devices, when placed in a group, subconsciously fall into the rhythm of the group, and a slow operator entering the group will pick up a certain amount of speed. In addition, it is important that each clerk be assigned a full day's work, which is, of course, the result of job analysis and time study work. By A. P. McIntyre. *The Society of Industrial Engineers Bulletin*, December, 1926, p. 27:6.

Organization, Operation and Control of a Stenographic and Typing Department

A description of the American Central Life Insurance Company stenographic and typing department in which a percentage of the departmental savings are given to the workers in salary adjustments. A daily report shows the condition of the work. All work is measured on a linear basis. An incentive to accuracy is obtained by giving no credit for rewritten work owing to the girl's error. The weekly report of each girl's record is issued as a bulletin from the Planning and Personnel office at the end of each

week, and considerable interest is shown in this record. Since 1921 there has been a 15 per cent increase in linear production and a 25 per cent decrease in personnel. The increase in individual production was 49 per cent. The gross total production including automatic machines was 67 per cent. By Harold C. Pennicke. *N. A. O. M. Quarterly Bulletin*, November, 1926, p. 5:3.

The Problem of Making the Office Worker Stay Put

A consideration of equitable salary and promotional adjustments of office workers, not of how to keep them static. A portion of an index chart of typical jobs is shown. This chart, once used, is indispensable in making promotions, transfers, salary adjustments and in training employees. By Harold B. Bergen. *The American Stationer and Office Manager*, December, 1926, p. 8:3.

An Intelligence Test for Stenographers

The Milwaukee Electric Railway and Light Company is profiting by the use of the described intelligence test for stenographers devised to supplement a trade test. Twenty-four stenographers served as subjects. The criterion was a ranking by an examiner who knew their work at first hand and who took into account salary earned, difficulty of work handled and opinions of department heads. Correlations were obtained: intelligence test with ranking 0.73, trade test with ranking 0.48, intelligence test with trade test 0.12, and both tests combined with ranking 0.59. By Sadie Myers Shellow. *Journal of Personnel Research*, December, 1926, p. 306:3.

Office Building Operation and Maintenance

A detailed description of building maintenance organization, job analysis and schedule of work, accounting and cost control of operations, comparative cost of statistics and a consideration of some points to be observed as sources of econ-

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omy. Several exhibits illustrate general maintenance policies, work charts for janitors and charwomen, classification of building maintenance accounts, distribution of office building expense, a state-

ment of building maintenance operating expense, and a statement of the quantity of labor and rates per hour by cities. By Frank L. Rowland. *N. A. O. M. Quarterly Bulletin*, p. 9:10.

Administration: Regulations, Supplies, Communications

Plans for Decreasing Tardiness and Absenteeism

A report on plans and methods that have been found successful in decreasing tardiness and absenteeism in the 524 firms which cooperated in the study. There are systems in which penalties are employed, and plans that call for executive supervision. Details of a successful contest plan are given, and the method by which one firm places the responsibility on its own employees through a workers' congress is outlined. There are, in addition, suggestions for getting salesmen to start work early each morning. Report No. 236. The Dartnell Corporation. 23 pages.

Accounting By Tabulating Machines

This is the beginning of an article which covers two primary questions:

1. Can the various needs of an entire cost-accounting system be satisfied by tabulating-machine methods?

2. What are the typical economies and advantages of tabulating machines as applied to accounting? Summaries of Business Research, *Harvard Business Review*, October, 1926, p. 80:17.

Distributing Desk Responsibility

In one office there is a rule that no man can be promoted until he has an understudy ready to take his job on short notice. This has finally dissipated the early prejudice of the department heads against dividing their responsibility.

A certain salesmanager believes that each employee should have some apprenticeship to responsibility. Each of the stenographers knows about a certain slice of territory, just as each of the salesmen does. As a consequence, things run smoothly in the absence of the manager, not because of the routine of the office, but because the staff has been trained to handle the unusual, and is not frightened thereby. By Eleanor Gilbert, *The Office Economist*, January, 1927, p. 3:3.

PRODUCTION MANAGEMENT

General: Promotion, Organization, Policy, Development

Mass Production Versus Scientific Management

The Ford contribution on mass production to the new edition of the Encyclopedia Britannica fails to make clear that this is a phase but not the whole of scientific management. The possible applications of mass production are necessarily limited, but there is scarcely any limit to the possible and advantageous application of scientific management. By Fred J. Miller. *Manufacturing Industries*, December, 1926, p. 427:2.

"We'll Show 'Em"

This is the tocsin of war declared by the cotton textile workers of Massachusetts, who are facing killing competition. There has never been a narrower margin of profit, nor a more restricted demand. The spindleage of the country is based on a woman wearing at least eight yards of cotton fabrics. There is no industrial change that has had as marked an influence on the economic condition of workers, manufacturers, stockholders and communities as short skirts. The age-old

desire for the feel of silken fabrics was gratified when wage levels were elevated until they met the retail price of the desired product. Thousands of girls have been out of employment for several days each week as a result of curtailment of operations, but they were wearing the modes that were the cause of the cutting in half of their weekly wage.

The only real remedy is work, more work and better work. Work for the governor; work for the legislature; more work for the agent in styling; more work for the selling agent in broadening his market. Because, ultimately, it's everybody's fight to keep an industry going. By Charles G. Wood. *Barron's*, January 10, 1927, p. 16:1.

Plant: *Location, Lighting, Heating, Ventilation*

Six Major Factors in Plant Location

Transportation facilities do not always keep pace with industrial development. The use of aviation in addition to other methods is becoming a consideration. Sources of supply of raw materials and markets may force the relocation of a plant. Labor supply changes with surprising rapidity. The central power station has recently become a very important

factor influencing the selection of a plant site. Water supply is also an important element. Unless a factory is of an unobjectionable character it does better to locate in a district beyond which there is likely to be legislation against fumes, odors, hazards, etc. Incoming competition may bring about relocation. By Harrison S. Colburn. *Manufacturing Industries*, December, 1926, p. 409:4.

Industrial Economics: *Labor and Capital, Legislation, Wage Theory, Immigration*

Prevalence of the 5-Day Week in American Industry

The United States Bureau of Labor Statistics in its recent survey of wages and hours of labor has obtained considerable material on the 5-day week in industry. Of the larger industries, it is most prevalent in the manufacture of men's clothing. Here, no less than 45 per cent of the establishments covered, were working on a 5-day week.

Six per cent of the union membership in all of the building trades covered are working on a flat 5-day week basis, the trades most affected being lathers, painters, and plasterers.

In the printing and publishing of newspapers a working week of 40 hours or less, but worked variously in five or six days, is quite frequent.

The iron and steel industry still has many employees on rather long hours, but

the survey found that 2.1 per cent of all the employees covered worked a regular 5-day or 5-night week. In the foundries and machine shops, 3.8 per cent of the plants have a 5-day week. Various other trades and industries are mentioned with the number of working hours given. *Monthly Labor Review*, December, 1926, p. 1:10.

An Hypothesis Concerning the Duration of Business Cycles

The duration of business cycles is a function of the stage of industrial development. This function is such that during the early stage of industrialization the average duration of cycles is relatively long, there is a distinct shortening of the average duration during the period of sharp industrial and economic transition, and during the era of relative stability which follows this transition the

average duration of cycles again increases. This evidence is supported by three different types.

The relatively short average duration of American cycles may be due to an exceptional prolongation of the period of

industrial transition in this country, which in turn may be due to the geographical extent of the country, and to its industrial diversity. By Frederick C. Mills. *Journal of the American Statistical Association*, December, 1926, p. 447:11.

Employment: Classification, Selection, Tests, Turnover

Why Employees Leave: Company Records and Analysis of Causes of Exits

The exit interview will prevent arbitrary discharge by foreman or department head, disclose personal grievances or misunderstandings, reduce turnover due to improper selection and placement, expose unsatisfactory working conditions and personal, home and community conditions, and develop employee good will. By Lloyd R. Miller. *Journal of Personnel Research*, December, 1926, p. 298:8.

Labor Turnover: How Is Its Significance Best Presented to Supervisors?

A brief description of the best methods of gathering turnover data; selling the supervisors the responsibility for turnover; and ways by which supervisors can reduce turnover. By Eugene J. Bengé. *Journal of Personnel Research*, December, 1926, p. 293:4.

The Clinical Method in Industry

The selection problem in industrial psychology has been limited in practice almost entirely to choosing the worker for the job. Its other phase of readjusting the dissatisfied or incapable employee in order to prevent separation has been generally neglected. Yet low labor turnover and efficient production depend quite as much upon the wise readjustment of the worker who fails on the originally assigned job as upon adequate vocational selection procedure. Readjustment in this sense becomes a problem of vocational guidance in which industry is increasingly interested. Such guidance presupposes the application of the clinical method, which considers psychological examinations and

objective test score results in relation to the other variables affecting employee maladjustment. The six important factors which must be carefully studied and evaluated in pairing the worker and the job are: health, mental ability, temperamental individual characteristics, personal interests, personal appearance, social and economic conditions. The case study of industrial vocational guidance shifts the emphasis from the selection of the new to the guidance of the maladjusted employee. A taxicab company applied this clinical method in a study of its 1924 employee drivers and found that the difference in annual earnings between the 25 per cent of its best and the 25 per cent of its poorest earners was from \$600 to over \$1,000. The study showed that age, health, marital condition, wage rates, work incentives, number of jobs held prior to employment by this company, temperamental traits, and other more complex causes variously affected adjustment to the job. The predominance of a single cause in each case studied suggested the possibility of individual readjustment on the basis of an intensified effort to search for the job best adapted to each individual case. By Morris S. Viteles. *Industrial Psychology*, December, 1926, I, 753:6.

Cooperation With Personnel Department

In the American Chicle Company production runs about 25 per cent heavier in summer than in winter. This means seasonal heavy employment and seasonal heavy layoffs. Their detrimental effect on the labor force was obviated by a system

of cooperation among the planning, production and personnel departments. The planning department makes up tentative production schedules for the following week. From these the personnel department in consultation with each department head makes up the various departmental organization charts, supplying for that week from the occupational personnel file the help needed for each departmental production. Every one on the factory payroll is assigned a definite job. The overflow are sent to the miscellaneous work department on a minimum weekly pay basis, and are transferred on production as needed. The personnel department is responsible for carrying out these production plans, and keeps track of them by a daily check list of assigned employees. The system is approved by the department heads who found it a relief from production details and an effective way of decreasing labor turnover and manufacturing costs. It is liked by the employees who know that it eliminates favoritism and gives each worker a status which has proved an added incentive. By Minnie E. Preusser. *Brooklyn*, January 1, 1927. 8:6:2.

A Mechanical Ability Test

The author describes a paper and pencil performance test for mechanical ability.

The test consists of seven parts printed together in a booklet. The reliabilities of the separate parts are as follows: Tracing .80, tapping .85, dotting .74, copying .86, location .72, blocks .80, and pursuit .76. The reliability of the whole test was found to be over .90 with each of three groups of subjects, numbering 35, 80 and 250 cases.

The test measures something other than mental alertness, since it correlates less than .20 with a group mental test.

When test scores were compared with teacher ratings on mechanical ability, the correlation was in no case over .48. But different results were obtained when test scores were compared with ratings on mechanical work the students turned out.

In two such studies in which most of the raters did not know who did the work they were rating, correlations of .81 were found, while in another study the correlation was .32. By T. W. MacQuarrie, University of Southern California. *Journal of Personnel Research*, January, 1927, p. 329:9.

Selective Placement of Metal Workers

Is there any relationship between a factory worker's intelligence and his success and stability? Can intelligence tests be used to advantage in the selection and placement of factory operatives? The first year's investigation, by Dr. Pond as here reported, yielded only inconclusive results, too tentative to serve as an aid in hiring and placement. In later articles Dr. Pond will present additional and more conclusive evidence which led to the installation of the tests as part of the employment procedure of the Scovill Manufacturing Company.

This investigation of the use of intelligence tests in the selection of factory workers was made in a New England brass factory. Eight tests were tried out, seven of them taken from the Army series, and one entirely new.

The tests were given to all newly hired workers over a period of a year, though the placement of the men was not affected by their scores.

In order to evaluate the tests for groups doing comparable work, the employees tested were divided into a number of occupational classes based upon their tasks. As criteria for the evaluation of the tests the author used (1) highest weekly pay, (2) increase in earnings, (3) foremen's ratings, and (4) terminations.

No marked agreement was found between earnings, foremen's ratings, and length of service. Interviewers' and examiners' ratings correlated low with foremen's ratings and earnings. Correlations between test scores and factory criteria of success were also very low.

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in percentages of employees hired, the author found significant preferred ranges or critical sections in test scores in nine out of twenty-nine occupational groups. The proportion of terminations was considerably less for those whose scores fell

within these preferred ranges of test scores. Similar preferred ranges were set off with foremen's ratings as criterion. By Millicent Pond, Scovill Manufacturing Company. *Journal of Personnel Research*, January, 1927, p. 345:24.

Benefit Systems and Incentives: *Group Insurance, Pensions, Vacations, Profit Sharing, Wage Plans, Suggestions, Stock Ownership*

The High Cost of Applesauce

A somewhat reactionary view regarding the question as to whether men really like to work for a highly benevolent company or not. Apparently, the workers who cannot of their own will take care of their future are benefited by a paternalistic company and give it their loyalty. But the type possessing the qualities of leadership, the future executive, resents paternalism. He would prefer a cash bonus, representing the cost of welfare, to all the insurance in the world. If the company has money to spend in welfare work, it means that the workers have made it profitable enough to do so. Even when achieving its object of reduced labor turnover, many a welfare plan is making the organization serve largely as a university for the strengthening of its rivals who pay cash instead of "applesauce." By Edgar H. Felix. *Printer's Ink*, December 30, 1926, p. 97 :3.

convenient payment basis. Through its group life insurance plan, effective since January, 1924, employees in continuous service from six to twelve months receive \$250 of life insurance and one-third of the additional insurance free. This additional insurance is proportional to the rate of earnings and costs the employee about 70 cents monthly per 1000. The company pensions its veteran employees since January, 1903. The retirement minimum is 20 years of continuous service. Up to 1925 the company has paid out over \$6,600,000 in pensions. Finally the Southern Pacific Company gives opportunity for advancement by promotion from within. This policy is strictly adhered to, for all of the present executives of the Road have come up from the ranks. By F. Q. Treadway. *Pacific Factory*, December, 1926, 28, 17 :3.

Annual New Year's Bonus Distributed to Employees

A bonus of almost two thousand dollars in gold was distributed in the Gold Room, Chalfonte, on New Year's Day by the Leeds and Lippincott Company to the 181 employees of Chalfonte-Haddon Hall who have been in the service of the organization for five years or more. These comprise 19.4 per cent. of the total payroll. *Sand and Spray*, January 8, 1927.

Help Employees to Help Themselves: Southern Pacific Policy

The Southern Pacific Company in its broadminded personnel policy helps its employees to better themselves and facilitates their financial security. Through its apprenticeship schools it teaches embryonic craftsmen in addition to shop work the elements of their trade, and prepares them to advance to the status of mechanics. The company provides employee medical, surgical, and hospital service at nominal hospital dues in case of accident or sickness. Its stock purchase plan enables any employee to buy from one to fifteen shares of company stock on a

Wage Systems—An Appraisal

This article covers the different types of extra incentives. A study of many cases points to the conclusion that, speaking generally, the burden of proof still rests upon the incentive-wage methods to

show their superior efficacy as compared with the simpler time- and piece-wages. They have so often been associated with complete and careful revisions of manufacturing control and processes that there is plausibility in the impression that they are the significant factor in the resulting successes. Such a conclusion, however, overlooks the essential nature of business management; it errs in mistaking one of the devices of management for management itself, and is likely to divert attention from the real elements of successful administration. There is no intention here to be unduly critical of the various systems in themselves; it is admitted that most of them have served well in given cases, but these successes have been not so much based upon their innate virtues as derived from their use in the hands of intelligent executives who, with equal intelligence and equal care, would have been just as successful with other tools.

The Bedeaux system appears to be an exception to this rule, but its more recent successes have been due to its embodying the principal advantages of a piece-rate, and further advantages for certain administrative purposes. But the great majority of men are still paid on time- or piece-wages. By T. H. Sanders. *Harvard Business Review*, October, 1926, p. 11 :20.

Long Service Medals Given to Universal Portland Cement Company Employees

The Universal Portland Cement Company recently gave a banquet in the plant dining room to its workers who had served more than 25 years in the ranks of the United States Steel Corporation, of which the Cement Company is a part. Medals in the form of silver watch charms, bearing the likeness of Judge E. H. Gary, were presented to 14 employees of the local works, having a service record from 25½ to 34½ years and previously employed in companies that had been merged into the United States Steel Corporation. By J. H. Kempster. *Cement, Mill & Quarry*, December 20, 1926. p. 28:1.

First Year of Norton Co.'s Credit Union

The Norton Credit Union has 800 members who receive 6 per cent on their investment. It has loaned money on a sound financial basis to over 300 of its members. The Norton Co. exercises no control over the credit union. An office is furnished in connection with the employment department and the company gives the service of a clerk. Loans are only made for necessities such as coal, home building, illness and the like. The committee which passes on the loans consists of the employment manager and two general foremen all of whom are intimately familiar with the personnel. *The Iron Age*, December 23, 1926, p. 1760 :1.

The Employees' Payroll Deduction Insurance Plan

Under the terms of the Employees' Payroll Deduction Insurance Plan of the New York Telephone Company, the opportunity is offered to the employees, within certain liberal limits of age and amounts of insurance, to obtain life insurance without medical examination, without discrimination as to sex or occupation, and to pay the premiums on the insurance through the medium of payroll deductions. The different types of life insurance policies available under the plan make it possible to meet a great variety of insurance needs. *Telephone Review*, December, 1926.

A New Composite Index of Wages in the United States

Charts are shown giving a comparison between old and new composite indexes of wages in the United States. Taken as a whole the composite shows the average wages for the country at the present time nearly one-third higher than at the close of the war. It brings more sharply than ever in contrast the course of wages and commodity prices. There is the astonishing paradox of higher wages, apparently lower prices, and abnormally high profits. It means for the wage

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workers of the country a difference in extra spending power of not less than 6 or 8 billions annually, which probably explains the prolonged building boom and large sales of automobiles and other things formerly classed as luxuries. By Carl Snyder. *Journal of the American Statistical Association*, December, 1926, p. 466 :5.

Brooklyn Jobber Pays Bonus

David H. Smith & Sons, iron and steel jobbers of Brooklyn, N. Y., have voted a cash and stock bonus plan for employees to be awarded on the following

basis: Employees with one year of service to receive one week's pay; with two years' service, two weeks' pay, and so on, with a week's pay added for each year of service up to and including five years. Employees may elect to receive stock, one and a half shares of stock to be given for each \$100 of bonus, and the odd amount, if any, to be paid in cash. For the past three years the company has paid 8 per cent dividends on its stock, and there is no likelihood that the rate will be lowered in the coming twelve months. *The Iron Age*, December 30, 1926, p. 1823.

Training and Education: Schools, Libraries, Apprenticeship, Employee Publications, Bulletin Boards

Newport News Apprentice Training

In the Newport News Shipbuilding and Dry Dock Company there are besides 6,000 employees, 220 apprentices in 16 or 17 different trades. The policy of promoting contract, premium or piece work by which the boys are enabled to materially increase their earnings is being pursued. There is an apprentice association which provides for self government of the student body. Athletics are encouraged, and interest in the work is promoted by various incentives. By Charles F. Bailey. *Manufacturing Industries*, December, 1926, p. 447 :2.

Training Apprentice Engineers in the Duquesne Light Company

For three years this plan has been in effect with gratifying results. Each apprentice is carefully graded by each key man for whom he works. An apprentice engineers' supervisor is appointed for each department and these grade reports are forwarded through the supervisor to the vice-president who has direct control over this training. This grading has a beneficial effect on both graders and graded. The training is general departmental in rotation, and at the end of the year the apprentices are required to submit a list of departments in order of

preference into which they wish to fit. There is an apprentice engineers' club which has a camp on the Allegheny river with various attractions. Of the 47 apprentices employed during the past four years only one has left the company. By R. L. Kirk. *Byllesby Management*, December, 1926, p. 15:3.

Trade Training

The "how" of apprentice training in the Westinghouse Electric and Manufacturing Company is described. The responsibility for training rests upon the centralized training department, whose representatives maintain personal contact between the company apprentice and his superiors. Applicants are obtained through general publicity, and in cooperation with the employees' families and the public schools. All applicants must pass an arithmetical and a physical test and are placed on probation for six months. Before entering the full four-year training course a trades-apprentice agreement is entered into by the parties concerned. The training work is functionally divided between supervised shop experience and systematic classroom instruction in the trades-apprentice school. Provision is made for constructive incentives, among which are semi-annual apprentice wage

increases, apprentice group grading, individual attention, diplomas, careful placement, follow-up after graduation, annual prizes for meritorious work, and scholarship awards. Incentives are applied on the basis of carefully kept apprentice records and quarterly reports on each student-worker from the trades-apprentice school. The East Pittsburgh plant of the Westinghouse Company requires about

300 apprentices in training at all times in order to insure a continuous supply of trained men among its 12 to 15,000 regular employees. Approximately one-half of the company graduate apprentices in 1908 are still with the organization, and 40 per cent of these are doing supervisory work. By Carl S. Coler. Reprint. *Mechanical Engineering*, Mid-November, 1926, 1257:4.

Shop Organization: Planning, Methods, Job Analysis, Standardization, Waste

50% Cost Reduction in Machine Parts

The use of welded steel instead of gray-iron castings for machinery bases, frames and other parts offers an effective method of reducing manufacturing cost without sacrificing quality. Another advantage of welded steel is that there are no patterns, the work being done directly from drawings. By Robert E. Kinkead. *Manufacturing Industries*, December, 1926, p. 423:2.

Progress in the Elimination of Waste

The two comparative tables given show the movement of wages and prices from 1920 to 1925 in the United States and Great Britain respectively. The American table demonstrates that union wages rose from 199 in 1920 to 238 in 1925, while the average wholesale price of all commodities

decreased during that period from 226 to 159. A similar British index shows a decrease in wage rate from 256 in 1920 to 175 in 1925 with a corresponding decrease in average wholesale commodity prices from 283 to 166 respectively. The wage increase running parallel with one in commodity price is peculiar to American conditions and represents the result of the nation-wide movement for the elimination of waste. Every group in industry from leaders and engineers to workers participate vigorously in this campaign. Since 1921 over 1200 group conferences have been held largely at the request of the industries themselves. At present 343 committees are cooperating with the U. S. Department of Commerce in carrying out a program of waste elimination. By Herbert Hoover. *Pacific Factory*, November, 1926, p. 19:3.

Employee Service: Hygiene, Recreation, Lunch Rooms, Stores

Some Aspects of Industrial Medical Practice

The purely medical work in industry comprises emergency sickness cases, counsel and advice on sickness problems, diagnostic service. Three types of persons frequent the company medical department for minor ailments. First, the average hardworking employee, who is physically and mentally normal but semi-occasionally appears for treatment of a short time cold or a stiff neck. The second group

is composed of the over anxious employee, who habitually visits the medical department at early symptoms of sickness. The third and smallest group comprises the neurasthenic employees, who are morbidly concerned over their ailments and consult the medical department on every pain of whatever duration or extent. Industry is justified in maintaining a physical disability repair shop, because at this incipient stage of their disease employees will invariably resort

to self-treatment. Many laboratorians be carried by employee be brought results of be asked the case good but employee ships. Health,

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to self-doctoring if intelligent first-aid treatment is not offered. In large company medical departments X-ray and laboratory diagnostic work can usually be carried out to discover the underlying causes of an employee's sickness. The employee's family physician should then be brought in and provided with the results of these examinations and tests and be asked to cooperate in the conduct of the case. This procedure is not only good business allround, but develops employee loyalty and good public relationships. By C. H. Watson. *The Nation's Health*, December 15, 1926, 817:3.

Safety Code

A novel departure in accident reduction has been made through the committee, formed a year ago by the Telephone Sales Department of the Western Electric Com-

pany. This committee compiled and has just issued a Safety Code for the use and guidance of the 7,100 company employees. The attractively printed and illustrated pocket edition of this code contains thoroughly constructive and practical rules. The information and data are based upon the actual experience and observation of managers of distributing houses, foremen of tool and machinery manufacturing concerns, and State Departments of Labor. The 65 subject headings are divided into short, numbered paragraphs, written by men who know what they are talking about. The principal object of the code is to make distributing houses accident-free. Other important features of the booklet are a chapter on "Cold Facts," a discussion of "Carbon Monoxide Gas," and tips for accident-free homes. *Western Electric News*, January, 1927, 14:2.

Labor Relations: *Collective Bargaining, Employee Representation, Arbitration*

Will Labor Aid in Management?

An abstract of the paper by Matthew Woll presented before the recent meeting of the A. S. M. E. and the discussion it provoked. Mr. Woll stresses the workman's need for creative expression and says that to fill this need the man turns to his union. Mr. Woll says that creative expression may be attained through job improvement and he hopes for increased production and efficiency through cooperation between men and management, which can be brought about through the trade union. Mr. DuBrul in discussing the paper said that the urge for creative expression is far from universal, and that the responsibility for disciplining cannot be transferred from management to the union. *The Iron Age*, December 30, 1926, p. 1817:2.

The Savings of Women Workers

In 1926 a group of students in economics in the Bryn Mawr Summer School studied what might be described as a

cross section of women in industry in the United States, ranging in age from nineteen to forty-one. They were experienced workers, with intellectual and physical equipment above the average. The study made it clear that the future of the women workers considered is one of great uncertainty, and it can be assumed that the future of all women in industry is no less precarious.

These facts emphasize the grave need behind the workers' insecurity, a need which should have first consideration in plans for individual investment, in every step of collective bargaining, and in the program for social insurance. By Dr. Amy Hewes. *American Federationist*, January, 1927, p. 72:6.

Labor Participates in Management Week

The Activities of Management Week have led to the belief that organized labor bodies in any community should become

more active in civic movements that have for their objective the betterment of society generally. They have been too provincial in the past. Central labor unions should take a leading part in every activity that is undertaken for human welfare—in education, law enforcement, and the election of public servants. Organized labor must ask itself this: what would it

do if it were suddenly translated into the official positions of government? Perhaps the waste would be much greater than that about which it now complains in public service. If education is essential to the engineer in industry, it is also essential to the successful labor leader. By William M. Rapsher. *American Federationist*, January, 1927, p. 47:5.

BUYING, RECEIVING, STORING AND SHIPPING

"Hand-to-Mouth" Buying

Mr. W. W. Atterbury, President of the Pennsylvania Railroad, believes that hand-to-mouth buying results in elimination of excessive inventory and makes possible more efficient employment of capital.

Mr. S. Horace Disston, Vice-President of Henry Disston & Sons, believes that hand-to-mouth buying is being carried too far, and that now the question of turnover has been carried very much to the extreme.

Dr. John T. Dorrance, President of the Campbell Soup Company, considers that this practice has resulted in benefit, but if close buying be carried to the point where it interferes with the manufacturer's consumer market through inadequacy

of distributors' stocks the practice becomes unsound.

Mr. Eugene G. Grace, President of the Bethlehem Steel Company, thinks the phrase unfortunate, implying as it does lack of thrift and foresight, when actually the forces at work cover the whole range of distribution and production.

That it is a good corrective of speculative tendencies is the view of Mr. Samuel M. Vaclain, President of the Baldwin Locomotive Works. He says that we should buy nothing because it is cheap, nor buy anything that we do not actually need, but to pay the market price prevailing when we purchase, and encourage an optimistic view as to future requirements. *The Girard Letter*, December, 1926. 9 pages.

MARKETING MANAGEMENT

"No Interest, No Sales!"

The Osborn Brush Company decided to sell its brushes through the dealer in spite of the fact that retailers believed they had to be sold by the house-to-house method. The company places great emphasis on the dealer being thoroughly interested in household brushes. Selling the dealer has produced results, as shown by the fact that business has greatly increased. In less than three years a nationwide wholesale and retail distributing organization has been built up, and with only seven salesmen. By Franklin G. Smith. *Business*, January, 1927, p. 30:2.

Customer Ownership Selling by Employees

The communities of the California Dregon Power Company are so scattered that stock salesmen cannot be used advantageously and the company depends entirely on the employees for stock sales. Employees are allowed \$1.00 per share on all stock sold. The banks in the territory also earn \$1.00 for each order of stock placed with them, but the number of shares sold in this way is never very large. All the office work incident to stock selling is handled in the secretary's office. An assistant secretary concentrates

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his efforts on sales and field work. Frequent informal meetings of employees are held at the home office and various division points on the system. There are no prizes nor bonus systems. The results attained by our customer-ownership campaigns have been very gratifying. By Darwin G. Tyree. *Byllesby Management*, November, 1926, p. 14:3.

Economic Aspects of American Foreign Trade

This article leads to some very interesting conclusions. In its newly acquired position as a creditor nation, the U. S. A. must continue to supply productive capital to foreign countries, and must, therefore, accustom itself to the expectation of normally purchasing more goods, services, and so forth, from abroad than it sells to foreign customers. Nevertheless, as in recent previous years, a permanently "unfavorable" trade balance may yet be postponed some time further into the future by means of heavy loans used for non-productive purposes.

In order to continue successfully to sell their manufactured products in the markets of the world, it is essential not only that Americans make it possible for foreigners to buy such goods, by in turn purchasing their materials from them, but also that they look closely to their unit

costs in order that they may manufacture and sell goods in competition with the low production costs of foreign countries. By Henry Reed Bowser. *Harvard Business Review*, October, 1926, p. 55:12½.

Europe Taking Up Instalment Buying

Reports indicate that instalment buying is spreading like wildfire in Germany and is even taking hold throughout the continent. Considering the aversion which Europe has hitherto held regarding this question, this report is very interesting. It will mean a decided increase in trade; exporters should carefully consider this development. German tradesmen apparently are convinced that there is no danger of further currency inflation. *Babson's Reports*, January 4, 1927.

When an Industry Starts to Fight

In spite of the growing use of electrical refrigerators there has been an increase in the consumption of ice. This is because the ice industry learned the lesson of cooperation and eliminated its own slipshod method of marketing ice, and followed the trend of the electric refrigerator people in educating the public in the preservation of food. Prompt and dependable service was emphasized, and better methods of accounting taught. By Merle Thorpe. *Nation's Business*, January, 1927, p. 64:2.

Sales Promotion: Letters, House Organs, Advertising

Checking Up On Data Secured by Mail Questionnaires

In order to discover who answered a questionnaire sent out by the Procter & Gamble Company, and who failed to answer it, as well as to learn how accurate was the information given, the following method was used: 1. Copies of the names and addresses were saved of all persons to whom the mail questionnaire was sent. 2. Three cities were selected for the purpose of sample study. 3. Personal interviews were secured and what they answered was compared to

their answers by mail, without obviously questioning the latter, however. 4. Personal interviews were secured with those who did not answer the questionnaire.

This investigation showed that of the housewives who answered the mail questionnaire, 92 per cent were found to be users of the product. Of those who did not answer, 40 per cent were found to be users. Those who answered gave information that was exceptionally accurate. In view of these facts, even the most bitter critics of this means of obtaining facts, may discover that their prejudices rest

upon their own mistakes in using the method rather than upon the method itself. By William J. Reilly. *Printers' Ink*, December 23, 1926, p. 71:2.

Wanted: Mature Salesmen Only

The Radio Distributing Company has replaced all its younger salesmen with mature men, and considers this step to be the chief factor in increased sales volume during the past year. After careful study of their problems they came to the conclusion that in such positions as their salesmen have to fill, maturity carries a certain degree of prestige that youth cannot command, however capable. Every member of their selling organization now, with one exception, is past thirty-five years of age. By D. G. Baird. *Sales Management*, December 25, 1926, p. 1065:3.

Sales Promotion: A Selling Fundamental of Major Importance

The most important divisions of sales promotion activities are: 1. Making dealers better merchants, and securing the most effective dealer use of sales promotion ideas and material. 2. The application of advertising to the selling job. 3. Development of advertising to the selling job. 4. Operating technique.

The most important angle from which to consider sales promotion is that it concerns itself with the material sent to dealers to stimulate their interest in the products of the company, and also the material prepared for dealers to be sent to the dealer's individual prospects and to be used in building his business.

A useful classification of sales promo-

tion material is this: 1. Catalogs. 2. Product cuts, newspaper mats, and logotypes. 3. Store cards and store display material. 4. Window cards and window display material. 4. Direct-mail advertising material. 6. National advertising material.

If this work is placed under the direction of one executive and that executive made responsible to the sales manager, greatly increased effectiveness per dollar spent is bound to result. By R. C. Hay. *Printers' Ink Monthly*, January, 1927, p. 56:4.

Co-operative Advertising

There are some phases of advertising which are group problems and which the individual cannot very well assume alone. These problems can be solved by cooperative effort, which has been employed so effectively, that more companies are seeking its application all the time. The purpose of the cooperative advertising campaign should be defined clearly and understood by everyone, and its purpose should be thoroughly economic as well as ethical. *Kardex Institute Bulletin*, December 29, 1926, 4 pages.

Would Purchasing Agents Buy More If Fewer Salesmen Called?

When prospects found that the Van Dorn & Dutton Company promised through the letters which they sent out that salesmen would not call, and that the company wished to save their time as well as its own, the customer list was immediately increased with a number of new names. By L. G. Hewins. *Printers' Ink*, December 23, 1926, p. 41:2.

Salesmen: Selection, Training, Compensation

How to Pick Men

Mr. Roy B. Wenzlick, Manager of the Merchandising and Research Department of the St. Louis Post-Dispatch, in an address before the weekly luncheon meeting of the Sales Managers Bureau said that

there are many things that cannot be found out about applicants for positions, and that it is absolutely impossible to determine character in an interview. Personal references are of no value. One of the most essential things in picking men

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is determining intelligence. Some companies have found that a high intelligence rating in certain positions is a liability rather than an asset, and that men of lower intelligence are more satisfactory and stick better. For instance, in one company the salesmen call on prospects of mediocre intelligence; a salesman of high intelligence is not able to find a common meeting ground with his prospects.

Intelligence cannot be determined merely in an interview. A case is mentioned where the applicant had a very pleasing personality, but in giving the man an intelligence test he was discovered to be subnormal, and it was learned later that he had once been committed to an insane asylum. *Sales Managers Bureau Bulletin*, December 17, 1926.

Profits, Not Orders Determine the Size of Our Salesmen's Pay Check

A branch or district sales manager has so many things to do besides selling that a compensation plan based on sales volume alone gives little or no credit for the efficiency of all the work done, and in addition is likely to run sales volume up at the expense of profits. In 1926 the Dictograph Products Corporation changed over from the policy of compensating branch managers on a basis of sales volume to an arrangement which gives an incentive to drive for new sales as well as total volume. The new plan, which includes salary, drawing account and commission, has effected a great improvement in branch management methods. Complete details are given. An interview by John Allen Murphy with William E. Snodgrass. *Sales Management*, January 8, 1927, p. 21:5.

"Fewer Managers, More Salesmen"

In many organizations there has developed a string of minor executives. It is time now to consider the influence upon present-day selling costs which is being exercised by the inclination to go to the opposite extreme of the old-time selling methods of practically no sales manage-

ment. In brief, the most important problem now which the heads of business houses are considering is an analysis of the value of the mass of bosses and executives and an effort to get a larger percentage of the gross selling expense into producing salesmen. By A. H. Deute. *Printers' Ink*, January 6, 1927, p. 85:5.

Nine Executives Answer the Question: Are Salesmen Burdened With Too Much Detail?

The vice-president of Robert H. Foereder, Inc., states that they keep their salesmen fully advised on overdue accounts, but that they place very little burden upon them as far as collection work is concerned. Another advocate of sales-work-for-salesmen is the sales manager of the Florence Stove Company. The Bulova Watch Company handles much of the necessary credit information as a trade association matter. The experiences of many companies prove that there can be no general rule as to how much credit information and sales promotion material should be sent to the men on the road; the situation in the Motor Meter Company here described seems typical. The sales manager of the Harvey Spring and Forging Company says it is all a matter of selection; he does not think that unpleasant matters and difficulties should be kept from the salesman's knowledge. The Peaslee-Gaulbert Company tried both methods: first no carbons or information, then full information, and found that their salesmen preferred the latter plan. The Indian Motor Cycle Company has had a similar experience with about the same results.

This discussion begins with a description of a salesman's schedule, which broke several men, and is concluded by the secretary and treasurer of the Edison Electric Appliance Company who sums up the essential difference in the functions of sales and credit departments, but emphasizes also the necessity for mixing them on special occasions. By Roy Dickinson. *Printers' Ink*, December 23, 1926, p. 3:8.

Survey of Books for Executives

Department Store Organization. Vol. I. By Arthur Lazarus, C.P.A. Dry Goods Economist, New York, 1926. 194 pages. \$3.00.

There is no doubt that there is a need for a book on department store organization, in which one would find fundamental principles of organization with material showing what present practice is and how this present practice can be improved. While Mr. Arthur Lazarus' recent book on "Department Store Organization" does bring together much that has been written and said on this subject, it falls far short of being a well thought out and scientific piece of work. It fails to touch the fundamentals of the problem.

While we should not differ with Mr. Lazarus' opinion, stated on page 6, that there cannot be one best form or organization for all department stores, we should not only think it desirable but we should insist that the basic functions of a department store be clearly stated and an ideal organization set up which could be used as a measuring stick. Of course, the presence of certain types of executives will modify the actual line up of duties, but this should not alter the recognition of the fundamental functions.

The book divides itself roughly into two parts. The first chapter of the first half is devoted to a discussion of "Organization of Paramount Interest," the next thirteen cover the usual divisions, departments and jobs in the merchandising and advertising divisions in a store, and the last chapter discusses "Main Factors in Organization."

The second part of the book is devoted to an appendix reproducing an actual Buyer's Manual, prepared and used by a well known Middle Atlantic department store.

The chapter on "The Chief Executive" is poorly arranged; omits certain rather important functions and includes certain

others which are not the functions of the chief executive. In the last paragraph of this chapter, we find the statement that "it is part of the job of the store owner to supply imagination and enthusiasm." Certainly this is one of the most important functions of the chief executive and should be given prime importance. A responsibility of no less importance is to coordinate all of the divisions of the organization. No mention is made of this, however, nor is there any discussion regarding the number of executives which should report directly to the chief executive. Furthermore, should it not be the responsibility of the chief executive to set up measures and standards of work for his various departments to enable him to judge their performance on the facts? This has been done in the department store field, to some extent, for selling departments, but practically not at all for non-selling departments. Until such standards are set we believe that the chief executive will not be able to reward the efficient executive and discover the inefficient one. While the chief executive should, as the author suggests, follow the weak departments, he should not fail to commend and praise those doing a good job. Some discussion of the qualities of leadership which we should all like to see developed would, we think, have had some value, but this subject has been entirely omitted.

Included among the functions of the chief executive we find the reducing of peaks. This we should suggest as being a very definite function of a technical department, such as the Research or Planning Department. Regarding such a department, we find no adequate treatment. The only reference to the value of research appears at the end of the first half of the book: "What the store requires is two or three research assistants constantly to feed the executives

with information." Certainly an adequate discussion of the need, utility, purpose, methods and benefits to the organization of a well organized Planning Department should be included in a book on department store organization.

In the chapter on "A United Front for Selling" the author stresses the need for a Vice President in charge of the merchandising branch of the business—a very important point.

Chapter V lists the functions of the Merchandise Manager. This list would be more helpful if the duties had been grouped and classified.

The chapter on "The Sales Manager" describes a new and important development. While the need for unified effort at sales is most desirable, it is not made clear just how the responsibilities of this executive will fit into the present order of things. What is to be the dividing line between the responsibility of the buyer for disposing of merchandise and the responsibility of sales manager? It is stated that "the Sales Manager shall be responsible not only for the planning of the sales, but also for the actual organizing of the events." Here again, how will these duties fit in with those of the Service Manager?

The chapter on "The Relation of the Merchandise Manager to Buyer" is adequately treated. It points out the new agencies at the disposal of the buyer in helping him to do the best job, and intimates that buyers who make use of them will be the successful ones. Also, the emphasis placed on the desirability of budgeting is good.

There is an entire chapter devoted to the duties of the assistant buyer while there is no similar list of buyer's duties. Therefore, a clear distinction between the duties of the two is not to be found in the book.

The chapters on the Salesperson and the Style and Comparison Department, we feel, are the best in the book. All the arguments in favor of a better paid salesperson are set down. The importance

and the value of a Style Department and a Comparison Department to a buyer are properly stressed.

Chapter XIV which deals with Work and Alteration Rooms is another example of the character of the book as a whole. We should venture to state that no group of departments has caused department store executives more concern than their service manufacturing departments. This is probably true because these departments have not been "treated as if they had a production" problem which needed special treatment.

While the author recognizes the problem, his only suggestion for getting better results is to place the workroom under the Merchandising Division. Certainly anyone at all familiar with department store operation is aware of the lack of understanding of management problems, on the part of the merchandising group. The greater part of this chapter is devoted to reproducing printed forms used by several large stores, with a brief explanation of each form. Here, again, any discussion of the various methods described is lacking.

The Buyer's Manual which occupies the second half of the book contains a good deal of useful information for a buyer, which might be grouped under the following headings:

1. Description and explanation of the organization.
2. Store Policies of the organization.
3. Duties of the Buyer.
4. System used by Buyer.

Here, again, comments and discussion are lacking. Is this the ideal manual? Certainly, if it is, it does not fit in with a good many of the author's ideas in the first half of the book. If it is not the ideal, where does it fall short?

In conclusion, we should state that while Mr. Lazarus has made a start, there still is need for someone to make a real contribution on the subject of Department Store Organization.

B. EUGENIA LIES, *Director of Planning,*
R. H. Macy & Co., Inc.

Economics. By Charles Ralph Fay. Oxford Book Company, New York, 1925. 130 pages. \$.68.

The aim of this book is to present a comprehensive, accurate, and pedagogically sound review of elementary economics as taught in the best American high schools. The topical method of presentation is followed throughout the book. After each section of a chapter there is a set of questions, also a set of definitions and statements of laws and theories. At the back of the book is a false-true test together with recent examination papers set by the Board of Regents of the State of New York.

Foreign Exchange Accounting. By Christian Djörup. Prentice-Hall, New York, 1926. 387 pages. \$10.00.

Many books have been published on the fascinating subject of Foreign Exchange. The majority deal more extensively with the "theory" than with the "practice." "Foreign Exchange Accounting" by Christian Djörup contains a little about the theory, but its value is in the fact that it accomplishes the purpose of the Author in outlining clearly and concisely a satisfactory method whereby a bank may conduct a Foreign Exchange Department.

A study of the book should materially assist any one interested in the working out or perfecting a system of recording exchange transactions. To obtain the best result one should study the contents in conjunction with the business with which he has to deal. Merely to read the book will prove interesting, but to gain the proper perspective one should take pencil and paper and work out the transactions as they are dealt with. The example forms submitted have been well chosen, but it is quite conceivable that many banks will have their own forms which may be used just as effectively.

Mr. Djörup emphasizes the necessity for a careful check on all transactions of a Foreign Department and has out-

lined just how such a check may be maintained. Any one who has had experience with exchange operations will agree with him that this is of prime importance. The advisability of having two more or less distinct organizations, one to carry on the business and one to audit, is the nearest guarantee obtainable against the possibility of fraudulent transactions being consummated. The auditing staff, after being carefully selected, should always take the attitude of the renowned Missourian who "must be shown." They should be satisfied beyond a shadow of doubt that every entry passing through the Department is bona fide, and that no voucher for which cash is paid is accepted without receiving the most careful scrutiny.

I consider the book should prove of real interest and assistance to any one wishing to study Exchange Accounting.

J. L. LAWSON, *Manager,*
Head Office Foreign Exchange Dept.,
The Royal Bank of Canada, Inc.

Why We Behave Like Human Beings.

By George A. Dorsey, Ph.D. Harper & Bros., New York, 1925. 487 pages. \$3.50.

Professor Dorsey's book contains a tremendous body of facts concerning the physiology and psychology of man presented in a vivid, emphatic style. The reader's attention must be maintained at a consistently high level if he is to keep up with the rapid fire presentation of fact. Perhaps, that is the reason why one finishes the book with a breathless feeling of somehow having failed to grasp an overall picture of human development.

The author discusses the Individual Life Cycle, the Evolution of Earth, Life and Sex, the Process of Living and the Germs of Death, Endocrine Glands, the Mechanism of Adjustment, Acquiring Human Behavior, the Newer Psychology, etc., in the comparatively brief space of 484 pages. The discussion throughout makes no concessions to popular super-

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stition and sentimentality. The aim is to stimulate the reader to a thoroughly rational and unemotional viewpoint. Doubtless the method of leaving out practically all qualifying adjectives and sometimes of treating controversial subjects as proved fact contributes to this end.

On the whole this book may be regarded as a particularly successful contribution to the growing body of popularized scientific material. I hazard a guess that practically any reader, no matter how learned, would come upon some new fact of special interest to him.

D. V. WESTON,

*Personnel Research Assistant,
Western Electric Company, Inc.*

The Mind of the Millionaire. By Albert W. Atwood. Harper & Bros., New York, 1926. 256 pages. \$2.50.

An analysis of the motives of wealthy men, under such captions as His Likeness Unto Other Men, Motives of Fortune Makers, Ethics of Fortune Making, the Rich Man and His Investments, Responsibilities of Wealth, Givers and Their Motives, What Becomes of the Rich Man's Income?, Wealth and Service.

What is Industrial Democracy? By Norman Thomas. League for Industrial Democracy, New York, 1925. 57 pages. 15¢.

After a statement of the problem, various aspects are considered, as: the autocracy of capitalism; trade unions and industrial democracy; producers' cooperation; consumers' cooperation; government and industrial democracy; the contribution of employers; theories and a classification of approaches; with a closing query as to whether it is possible.

Many of the better known plans are contrasted such as: the Baltimore and Ohio, Plumb, Miners', Columbia Conserve, Wappingers Falls, "Golden Rule" Nash, and Rockefeller, as well as foreign plans.

Public Utilities and the Law. By William M. Wherry, Jr. Writers Publishing Co., New York, 1925. 323 pages. \$3.00.

Many cases are used to illustrate the discussion of such features as: rate fixing problems, amortization of losses, relation of rates to service, framing rate schedules, the rate base, accrued depreciation and going value, rate of return, operating expenses, distribution of rates, the indeterminate permit and certificates of convenience and necessity. Public utility regulation as a process of law and a form of public utility bill are also presented.

The Financial History of The American Telephone and Telegraph Company. By J. Warren Stehman, Ph.D. Houghton Mifflin, Boston, 1925. 332 pages. \$2.50.

This volume gives a detailed history of the growth of The American Telephone and Telegraph Company, beginning with the early financing of the invention of the telephone from 1876 to 1879, following it down through the Bell Telephone Association, the New England Telephone Company and the Bell Telephone Company, the National Bell Telephone Company, the American Bell Telephone Company, and finally, the American Telephone and Telegraph Company. It discusses, among other things, the Western Electric contracts at 4½ per cent charge, and the effect of Government regulation on the growth and financial success of the Bell System.

The Relation of Government to Industry. By M. L. Requa. Macmillan, New York, 1925. 236 pages. \$2.00.

After a consideration of paternalism, communism and individualism; the Russian experiment; present-day conditions in the U. S.; the significance of population in the relation of government to industry; the significance of raw materials; the significance of transportation;

the problem of agriculture; and the relation of capital, labor and government, the author concludes that a conservation of our mineral resources is imperative; that the demand for adequate production can be satisfied only by individual compensation which will be possible only through educating the people; that there should be governmental supervision of the public utilities which are essentially monopolistic; and that the public welfare demands harmonious, sympathetic and wise cooperation between government, labor and capital.

Margaret Bondfield. By Mary Agnes Hamilton. Thomas Seltzer, Inc., New York, 1925. 191 pages. \$2.00.

The biography of the first woman to serve in the British Government is brightly told by "Iconoclast" the author of several books on England's labor and laborites. Prompted by working conditions of the shop girl which she knew at first hand, Margaret Bondfield directed an alert mind and considerable talent in writing and speaking to organizing the workers in order to better their status. Her experience has also been international in that she has attended Labour conferences in Geneva and elsewhere, has visited Russia as an official delegate sent by British Labour, and has been to America more than once. Her diary reflects all sorts of other than political conditions in Russia, which apparently she absorbed with an impartial, detached and above all humane mind. She is compared to Joan of Arc in courage and unselfishness.

Analyzing Financial Statements. By Stephen Gilman. Ronald Press, New York, 1925. 213 pages. \$3.50.

Generously illustrated with tables and charts, this treatment of the mysteries of the financial statement resolves itself into these sections: the approach to statement analysis, comparative balance sheets, specific business ailments, balance sheet

ratios, historical analysis of balance sheets—ratio method, comparative seriousness of business ailments, historical analysis of balance sheets—trend method, standard ratios, conclusions as to analysis technique, profit and loss analysis, and using analysis methods in reports. There is also a restatement of fundamentals of analysis as a concluding chapter.

Scientific Foundations of Business Administration. By H. A. Overstreet and others. Williams & Wilkins, Baltimore, 1926. 331 pages. \$5.00.

Scientific Foundations of Business Administration embodies the lectures offered by the Bureau of Personnel Administration in a series of evening conferences during 1924 and 1925. The selection of contributors was based on the effort to secure a brief but clear statement of the contributions of different physical and social sciences to the understanding and advancing of contemporary business administration. Hence such well known names appear as Professor H. A. Overstreet in philosophy, Professor O. W. Caldwell in biology, Professor T. N. Carver in economics, Miss Mary P. Follett in social psychology, Dr. H. S. Person in management, and Mr. H. S. Dennison to make the practical application to business management from the scientific statements previously made.

As in any symposium volume, the reader finds the different contributions of unequal value for his personal purposes. The present reviewer finds great suggestion and illumination in the contributions of Miss Follett, Dr. Person, and Mr. Dennison. Indeed, it is a pity that the really original thinking contributed by these three authors to this problem might not have been given some more individualized setting, where their ideas could have claimed wider public attention. Miss Follett's ideas on the psychological foundations of business management cover in a strikingly original way such vital subjects as the nature of conflict, the giving of orders, the creation of purposive unity in a corporation, and the

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meaning and sources of power. Dr. Per-son makes a characteristically succinct and judicious statement of the development of the management movement, of its con-temporary problems, and of the attack which the most scientific firms are making on management today.

The whole volume represents a signifi-cant attempt to bring to bear upon mana-gerial science the best knowledge in all other scientific fields. In consequence, it deserves thoughtful reading at the hands of every student of management and op-erating executive. This kind of pioneer-ing formulation in the science of business is all too rare in this country. Yet the yield out of it in terms of practical sug-gestions can be great, if only the reader will address himself seriously to the text in the light of his own special problems. The notion that business reading can be made easy reading has such a wide grip on American business men that volumes like the one under review never get their proper evaluation from the business world.

Dr. Metcalf deserves great credit for mobilizing the kind of thinking which this volume includes in behalf of a worthier use of science of management.

ORDWAY TEAD, *Business Book Editor,*
Harper & Brothers.

Apprenticeship. Information and Expe-riences in the Development of Industrial Training. Department of Manufacture, Chamber of Commerce of the United States, Washington, 1926. 51 pages.

This pamphlet is a compilation of ma-terial published elsewhere and brought to-gether for convenient use of business ex-ecutives. It covers such topics as—What Is Apprenticeship?, Apprenticeship vs. Shop Training, Apprenticeship in Large Com-panies, How Can Small Companies Deal Effectively with Apprenticeship?, Voca-tional Education's Part in Apprenticeship, Co-operating Agencies for Effective Ap-prenticeship, the Laying Out of the Course, the Supervision of the Apprentice and Typical Outstanding Apprenticeship De-velopments and Activities.

To the reader the section on Apprentice-ship vs. Shop Training is a very disappoint-ing statement, entirely misinterpreting, as I understand it, the strong trend toward making the foreman a teacher of appren-tices and evidently the author is entirely unaware of the strong recent trend toward the elimination of formal instruction of apprentices in companies and the return to apprentice training on actual work im-proved by modern methods of teacher train-ing for foremen.

W. J. DONALD.

Health Control in Mercantile Life. By Arthur Brewster Emmons. Harper & Bros., New York, 1926. 234 pages. \$3.00.

The results of a six-year experiment in mercantile health work sponsored by the Harvard Medical School and a group of merchants chiefly in Boston, are made available in Dr. Emmons' valuable book.

Entering what was a pioneer field, Dr. Emmons bravely met obstacle after ob-stacle and won. He throws new light on the question of store employees' health. He has studied store environment from a spe-cial angle.

Dr. Emmons' studies show how impor-tant are the problems of ventilation, heating, lighting, the employees' home environment and personal habits, proper floors, noise and store sanitation. He gives practical advice as to how such problems may be met.

Some attention is paid to the store health department and how it should be adminis-tered, how the individual may be properly adjusted to his work so as to maintain his health and increase his efficiency. Physical examinations are advocated as a vital part of a health program.

The extent of the problem is indicated by such facts as the following: In a Pitts-burgh store of over 1,200 employees, ex-amination showed that 95 to 99 per cent had from one to five correctable physical de-fects. A physical examination and follow-up of about 1,400 applicants for employ-ment in a high grade Cleveland store

showed roughly 70 per cent with defects, each applicant with an average of two correctable defects.

What can be done by persistent effort in health work is indicated by the results in a large Boston store where absences were considerably reduced and where in a campaign in 1923-24 against colds alone, 5,495 days of lost time for this cause were saved. This meant an estimated reduction in wage cost alone of \$16,814.70 for that year.

Dr. Emmons has made a real contribution through the Harvard Mercantile Health Work, a contribution which will appear more significant as time goes on. There is room for this kind of work in fields other than the department store. Wise managements will study Dr. Emmons' book and plan for the extension of this effort to their own business.

DANIEL BLOOMFIELD, *Manager,*
Retail Trade Board,
Boston Chamber of Commerce.

Education for Management. Report of Committee of The Association for Education in Industry and Commerce. March, 1925. 47 pages.

Business management is beginning to be regarded as a profession in itself, its triple function being to lead an industry with advantage to its owners, to the employees, and to the public. Technical experts are never so hard to discover as men who are prepared for administration. This report outlines the qualities desirable in those occupying managerial positions, claims that these qualities can be developed by systematic training, discusses the possibility of selecting young men and women who, after systematic training, will ultimately show the greatest aptitude for management and also whether a public school or university education is an asset to a manager.

It then outlines the training necessary for management and sets forth in appendices the methods used by a few companies in Great Britain as well as the

work done in some of the universities. Addresses by Dempster Smith and D. J. Garden of the College of Technology, Manchester, emphasize the importance of training, of the method of approach to the solution of the problems and give more recognition to its importance than most American universities do.

Autobiography of Mother Jones. Edited by Mary Field Parton. Charles H. Kerr & Co., Chicago, 1925. 242 pages. \$1.50.

One of the most picturesque and intense of the American labor leaders vividly tells her story.

What the Coal Commission Found. Edited by Edward Eyre Hunt, F. G. Tryon and Joseph H. Willits. Williams & Wilkins, Baltimore, 1925. 411 pages. \$5.00.

Mr. Hunt has compressed into one book a presentation of all the worthwhile material written and assembled by the Coal Commission as the work of a force reaching, at least once during the year of its existence, 500 persons, and costing the Government about \$600,000. Because he has succeeded in this stupendous task of compressing such an abundance of material into one small book, and because he has done a good job in making selections from it, and in providing a splendid index for his selections, Mr. Hunt is to be highly commended.

But of what use is the original material, and to whom is it particularly useful?

I am unable to find in the report any new material that is useful or that is being used. I find nothing of value that has not long been known by all those to whom it is of any personal interest. No plans for the benefit of the industry are presented which are regarded as of sufficient merit to be adopted and finished by experiments and adjustments, necessary to make them workable.

There is a wealth of material in the

reports of which this book is a digest, concerning possible improvements in industrial relations through closer cooperation with the union. But the recommendations of definite plans for improving relations between the mine superintendent and the men on the job through adequate employee representation and improved wage systems; the fundamental improvements necessary to the success of the mine units of the industry, and therefore of the industry as a whole—these are so meager that the report is of no value to one who is working to improve the conditions from the ground up, rather than, in wholesale fashion, from the top down.

While I find it impossible to attach any great significance to the original material of which Mr. Hunt's book is a digest, I still think that no library devoted to the coal industry, to labor relations, to economics, to sociology, or to government functions, should be without it, (1) for the general information it contains; (2) for the illustration of the characteristics of special commissions of this kind, and (3) for its example of a good job of compiling millions of words into hundreds of words and indexing them for the great convenience of the reader.

J. C. LINDSEY.

Accounting Systems: Principles and Problems of Installation. By George E. Bennett. A. W. Shaw, Chicago, 1926. 545 pages. \$7.50.

As the author brings out in his Preface, "Accounting Systems: Principles and Problems of Installation," attempts a non-technical presentation of numerous principles of constructive accounting. It is a comprehensive work and falls in the text book class. It should prove of particular interest to students of accounting and business administration courses, as well as those business men who have not been keeping up with the many works on accounting published during the past few years.

The subject matter of this book has been divided into the following groups:

1. General theory.
2. Internal check and the scheme of organization.
3. Representative trading activity problems.
4. Representative service activity problems.
5. Representative manufacturing activity problems.

The problem chapters have been constructed around actual cases. The author admits that probably none of these chapters would be considered by experienced accountants as illustrating a perfect system. He suggests that the student criticize constructively each portion of the contents of each such chapter and work out the test problems which are included.

Section 1 covers the working principles of accounting, principles which are fairly standardized and a knowledge of which is necessary in order to appreciate actual accounting problems.

As its name implies, section 2 encounters the accounting principles of an auditing nature; section 3 is confined to principles of trading; section 4 presents cases where services are sold rather than goods; while section 5 covers manufacturing activity problems involving the process, specific order and estimated costs.

In giving actual model systems, the author has selected summer hotels and garages as representative of service activity problems; and foundries, machine shops, knit goods, clothing and co-operative milk manufacturing as representative of manufacturing activity problems. The chapter on co-operative milk manufacturing contains 80 pages and in this chapter has been developed a complete accounting system for such an industry. The subject matter for this problem has been furnished by Mr. T. Harlow Andrews, member of the staff of a Certified Public Accountant, who assisted the author in preparing this chapter.

Charting has not been overlooked and 97 illustrated forms for both internal business

use and external business use are reproduced throughout the book. Departmental organization, plant layouts and floor plans, are illustrated and described. In fact, the greater portion of the field of business of the average concern is covered.

In presenting the model solutions the author has been guided by the policy of showing how things are actually done in the small or moderate sized trading, service or manufacturing concerns, rather than giving a theoretical description of how things should be done.

If there are any business men or executives who have been postponing reading on the subject of accountancy until such time as the description of abstract general principles might be eliminated, they need not fear getting beyond their depth in this work. Test problems follow each chapter and test questions will be found at the end of each chapter in which some phase of the theory of accounting has been discussed.

This book will, no doubt, find its way into many of our universities as a text book on accounting and business administration.

J. D. WALBERG, *Comptroller,*
Sperry Flour Co.

Employee Representation. By Ernest Richmond Burton. Williams & Wilkins, Baltimore, 1926. 277 pages. \$3.00. "Employee Representation" by Ernest Richmond Burton, is one of the most recent and most thorough studies of this very interesting subject that has come to our notice. For any industrial executive who has not a Plan of Representation in effect in his factory it affords a most complete analysis of the philosophy and the practical operation of labor administration through Employee Representation.

For the executive in whose factory Employee Representation is now in use, it reviews the historical and philosophical background as well as the practical results of good and bad practice in other plants, and should serve as a guide to the successful operation of Representation Plans.

As Doctor Henry C. Metcalf says in

his preface to this work: "Whatever the motives originally prompting employers to inaugurate Representation Plans, the only valid measure of their work is to be found in the results of their operation," and the chapters covering results are most interesting and enlightening on this subject.

One of the conclusions reached by Mr. Burton as the result of his extensive investigation which preceded the writing of this book is "that Employee Representation seems to have emerged from its essentially experimental stage and to have entered upon a period of constructive accomplishment," also that the "scope of activities—has broadened from adjustment of grievances—to constructive participation by employees in the solution of managerial problems."

This is indeed a gratifying conclusion to those interested in Employee Representation, and one which Mr. Burton supports fully in his discussion and investigation.

Particular emphasis is laid on the proposition of joint meetings between employees and management, and the conclusion is that "regular and frequent joint conferences are almost certain to develop the habit of looking upon conflict as an opportunity for constructive co-operation rather than for battle." There has been much discussion and debate on this subject and the result of this investigation is particularly interesting.

To attempt to discuss the many other interesting facts and conclusions would be only repeating the work that Mr. Burton has so ably done. To summarize, the book is a most interesting discussion of this whole subject covering the philosophy, aims, achievements, and the facts with regard to it. Besides being scholarly it is practical and easy to read, and it is a most splendid contribution to this interesting and timely subject.

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Armour and Company.